U.S. ENVIRONMENTAL PROTECTION AGENCY, REGION II
Emergency and Remedial Response Division
290 Broadway, 18th Floor
New York, New York 10007-1866

MEMORANDUM

TO: Steve Cipot, RPM
ERRD/NJRB

FROM: Michael Sivak, Risk Assessor
ERRD/PSB

DATE: May 22, 2003

RE: Focused Feasibility Study
Lead-Impacted Soil Remediation
L.E. Carpenter & Company
February 2003

I have reviewed the above referenced document and offer the following comments:

1. Page 2-2, Section 2.2.2: The text states, "...NJDEP consider an alternative clean-up standard.... " The text should be revised to clarify that there are no soil standards (promulgated values) in the state of New Jersey, and that the soil values are criteria. This inconsistent use of the term " standard" occurs throughout the document, and should be corrected.

2. Page 3-2, Section 3.2.2: Since the likely future land use has changed from industrial/commercial to recreational and commercial, the cleanup goal for lead in soil must be revised to 400 mg/kg. The value of 600 mg/kg is protective for adults only, and is not meant to be applied to locations at which children will be present. The recreational area in particular is of most concern. The likelihood that children under the age of 6 may be exposed to the soils in this area with a regular frequency (such as daily trips to the park) is very high. The text throughout the FFS should clearly state that the cleanup goal is lowered to 400 mg/kg based on the likely future land use and that children will now be a population of concern.

3. Page 4-4, Section 4.4.2: The soil erosion and sedimentation control measures must include a

346883

component that monitors the lead concentrations in surface water and sediment. Due to the high concentrations of lead in the soils near the Rockaway River and the possibility of ongoing soil erosion into the river, ongoing monitoring of both the surface water and the sediment must be part of this plan.

4. Page 4-4, Section 4.4.2: This section should also detail the groundwater monitoring plan. With four public community supply wells within one mile downgradient of the site, the groundwater should continue to be monitored to ensure that leaching does not occur in the future.

5. Page 4-4, Section 4.4.2: The description of wetland mitigation measures identifies 400 mg/kg as the benchmark for lead. However, this concentration is based on protecting human health, not ecological receptors. Please revise this text to include an appropriate benchmark for ecological receptors in the wetlands.

6. Page 4-8, Section 4.5.2: This alternative proposed to use soils with lead concentrations greater than 400 mg/kg as backfill in the excavation areas. This concentration is protective of human health based on chronic long-term exposures. What is the maximum concentration of lead which would be included in this backfill material? Certainly, it would not be protective of public health to leave behind soil with lead concentrations that may pose an acute or subchronic health risk. What is the thickness of the proposed cap of granular fill material? Is any type of liner included in this proposal? What is the thickness of the proposed optional cover of topsoil? This information is necessary to determine the appropriateness of using soil contaminated with lead at a concentration exceeding cleanup goals onsite.

7. Page 4-11, paragraph 3: The text in this paragraph states that the value of 600 mg/kg was developed based on a soil ingestion exposure pathway. This is not entirely correct. This value was identified from an integrated exposure uptake model, which looked at exposure through several relevant pathways. Please revise the text to more accurately describe the basis for this value.

8. Page 5-12: The text states that onsite workers "...will have to be addressed by utilization of appropriate personal protective gear and institution of appropriate construction worker health and safety plans." The baseline risk assessment must evaluate all populations exposed to contaminants at a site; this FFS must be consistent with that approach, and should consider any worker exposure to lead-contaminated soils. It is not adequate to merely pass off this assessment to the health and safety plans.

9. Figures 4 - 9: It would be helpful to include the hot spot areas on all maps, so that it is easy to identify these areas relative to redevelopment plans (Figure 4), floodplains (Figure 5), lead-impacted soils (Figure 6), remedial excavation plans (Figure 7), and the plans for the two alternatives (Figures 8 - 9).

10. Page 5-9, Section 5.3.1: Please clarify the depth of soils considered to be "surficial" and " deeper."

/MAS